CLAIMS

We claim:

1. A method of administering a pharmaceutically effective dose of aerosolized Δ^9- tetrahydrocannabinol to a patient, comprising the steps of:

providing a composition comprised of a hydrofluoroalkane (HFA) propellant and a pharmaceutically acceptable form of Δ^9-tetrahydrocannabinol (THC);

aerosolizing the HFA/THC composition to provide droplets respirable by a lung of a patient, wherein the droplets include a Δ^9-tetrahydrocannabinol pharmaceutically effective dose.

2. The method of claim 1 wherein said HFA/THC composition comprises a pharmaceutically acceptable solvent.

3. The method of claim 2 wherein said HFA/THC composition comprises less than 20% w/w of a solvent selected from the group consisting of ethanol, propanol, propylene glycol, glycerol, and polyethylene glycol.

4. The method of claim 3 wherein said solvent comprises ethanol.

5. The method of claim 4 wherein said HFA/THC composition comprises less than 15% w/w ethanol.

6. The method of claim 1 wherein said HFA/THC composition consists essentially of a hydrofluoroalkane propellant and Δ^9- tetrahydrocannabinol.

7. The method of claim 1 wherein said aerosolized dose is sufficient to reduce nausea.

8. The method of claim 1 wherein said aerosolized dose is sufficient to reduce vomiting.

9. The method of claim 1 wherein said aerosolized dose is sufficient to reduce pain.

10. The method of claim 1 wherein said aerosolized dose is sufficient to relieve muscle spasticity.

11. The method of claim 1 wherein said aerosolized dose is sufficient to relieve migraine headaches.

12. The method of claim 1 wherein said aerosolized dose is sufficient to relieve movement disorders.

13. The method of claim 1 wherein said aerosolized dose is sufficient to increase appetite in a patient suffering from cachexia.

14. The method of claim 1 wherein said pharmaceutically acceptable form of Δ^9-tetrahydrocannabinol is pure Δ^9-tetrahydrocannabinol and said hydrofluoroalkane is selected from the group consisting of HFA 134a and HFA 227.

15. The method of claim 1, wherein the droplets are less than about 10 μm.

16. The method of claim 1 wherein at least 20% of the mass of the respirable droplets comprise droplets having an aerodynamic diameter of less than 5.8 μm.

17. A method according to claim 1 wherein the pharmaceutically effective dose is effective to achieve a serum level of 10-100 ng/ml.

18. A method according to claim 17 wherein effective serum levels are achieved within 15 minutes of administration.

19. A method according to claim 1 comprising a pharmaceutically acceptable salt of Δ^9-tetrahydrocannabinol.

20. A metered dose inhaler, comprising

a housing,

a metering valve connected to said housing; and,

an aerosol-dispensable pharmaceutical composition which includes a hydrofluoroalkane propellant and Δ^9- tetrahydrocannabinol present in a pharmaceutically effective concentration dissolved in said hydrofluoroalkane propellant.

21. The inhaler of claim 20, including a metering valve sized to dispense droplets less than about 10 μm.

22. The inhaler of claim 20 further comprising a lockout mechanism to prevent unauthorized consumption of the composition.